SONY

3-752-654-21(2)

Compact Hi-Fi Stereo System

Operating Instructions

LBT-D105

© 1991 by Sony Corporation

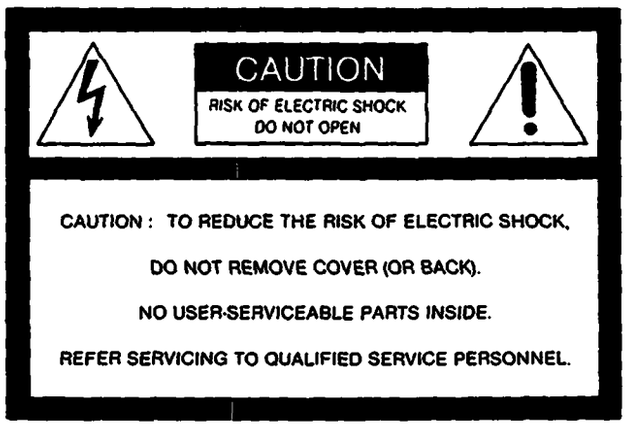
Owner's Record

The model and serial numbers are located at the rear of each model. Record the serial number in the space provided below. Refer to these numbers whenever you call upon your Sony dealer regarding this product.

Model No. LBT-D105 Serial No. _____

WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.


CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN
CAUTION : TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

*The graphical symbols are on the rear enclosure.

Safety Precautions

- Operate the unit only on 120 V AC, 60 Hz.
- Unplug the unit from the wall outlet if it is not to be used for an extended period of time. To disconnect the cord, pull it out by grasping the plug. Never pull the cord itself.
- The nameplate indicating the operating voltage, power consumption, etc. is located at the rear.
- Should any solid object or liquid fall into the unit, unplug the unit and have it checked by qualified personnel before any further operation.

If you have any questions or problems concerning your unit, please consult your nearest Sony dealer.

For detailed precautions, see the leaflet "IMPORTANT SAFEGUARDS".

Introduction

This manual covers the systems in the chart below. The number of your system is shown on the carton.

System number / Component	LBT-D105
Stereo deck receiver	HST-D105
Turntable	PS-LX47P
Speakers	SS-D115

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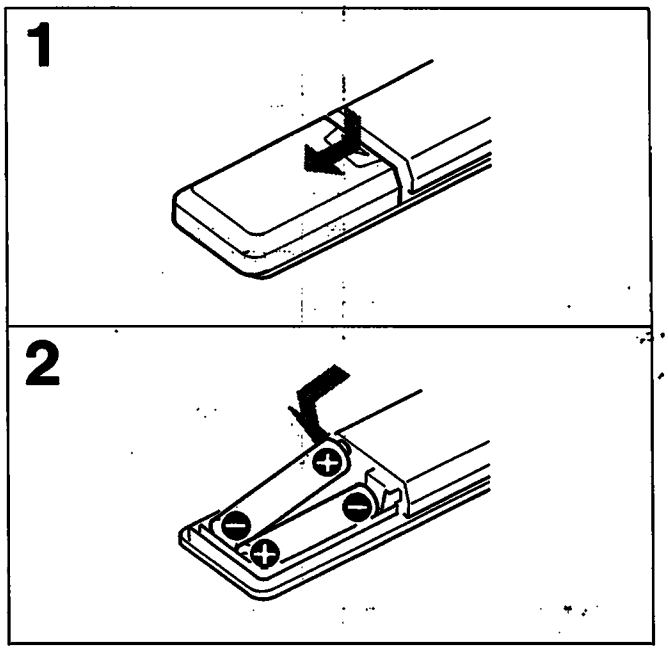
Installation

Remote Commander

Insert two size AA (R6) batteries with the correct polarity.

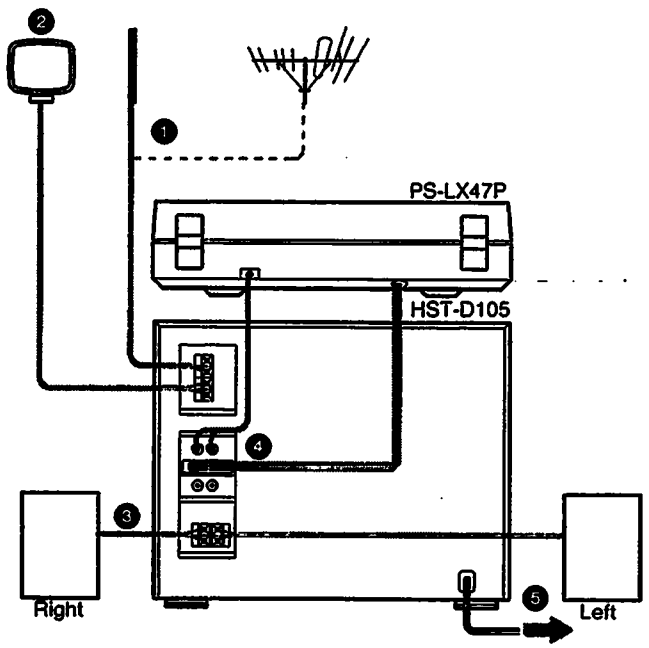


Battery life
About half a year of normal operation can be expected when using the Sony SUM-3 (NS) batteries.
When the batteries are exhausted, the commander can no longer operate the unit. Replace both batteries with new ones.

To avoid battery leakage
When the commander is not to be used for a long period of time, remove the batteries to avoid damage caused by battery leakage and corrosion.

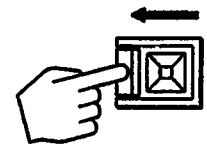
To avoid malfunction of the remote commander
Avoid keeping the commander in extremely hot or humid locations.

Installation

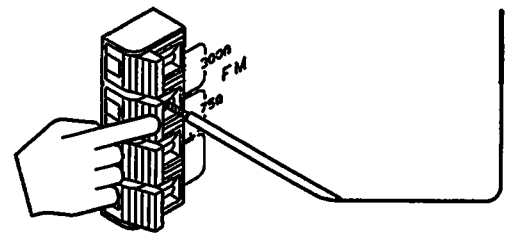


How to attach a wire to the terminal

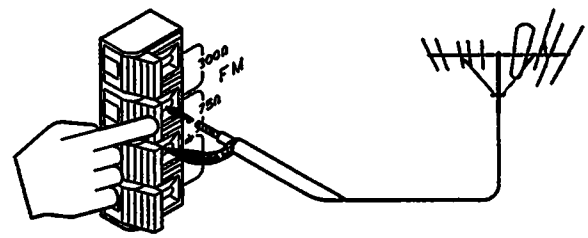
1 **Press down.**



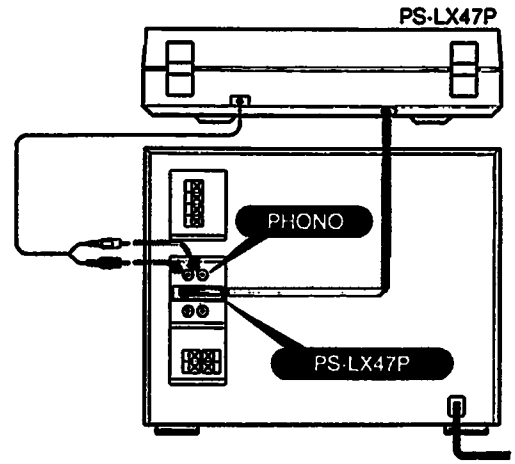
1 FM antenna



For better FM reception, connect to an outdoor antenna.



4 Turntable



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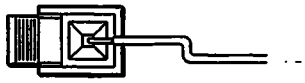
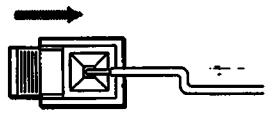
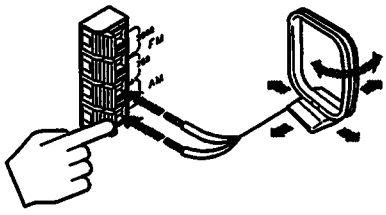


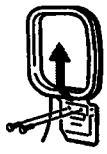
3 **Push up.**



❷ AM loop antenna

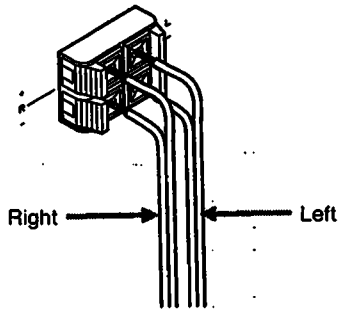


To attach to a wall



For better AM reception, connect a 6 to 15-meter insulated wire.

❸ Speaker cords

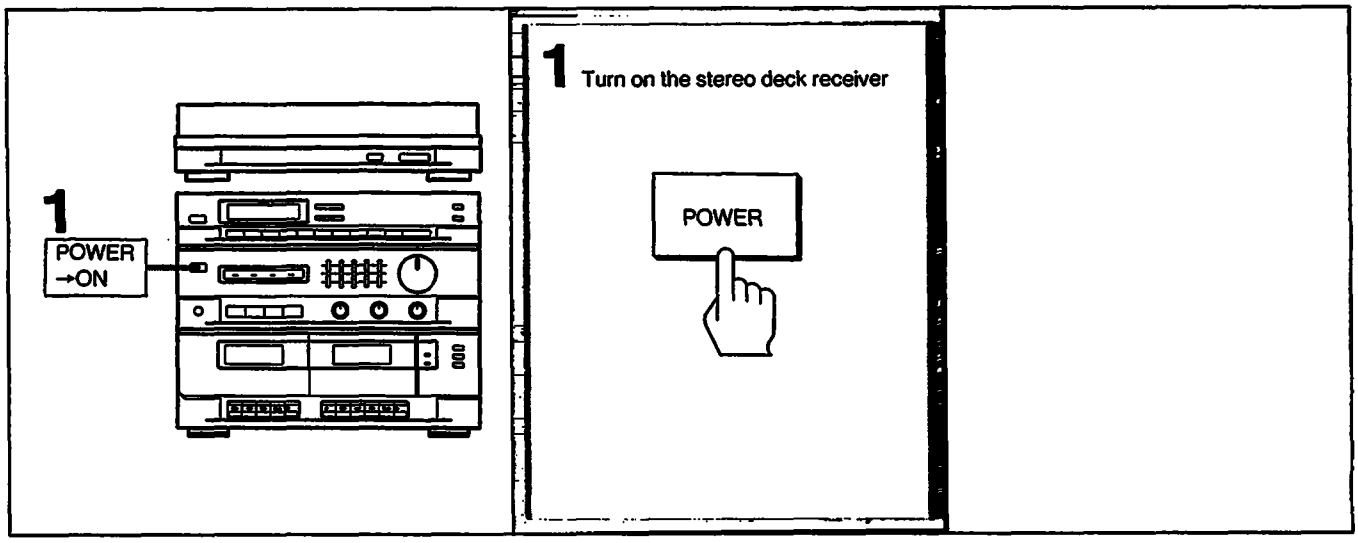


Refer to the leaflet provided with the speakers.

❺ Connect the AC power cord to a wall outlet.

Optional equipment
You can connect an optional CD player (Sony CDP-M11) to the CD IN jacks.

Turning on the Power



* Turn off the power of an optional CD player if connected when it is not used; otherwise, radio broadcast reception may be disturbed by noise.

Adjusting the Sound

The following operation applies only to reproduced sound.

Adjusting the Volume

To increase the volume, turn the VOLUME control clockwise.
To decrease it, turn the control counterclockwise.
- Turn down the volume before switching on the unit. This prevents damage to speakers.

Adjusting the Sound Quality

Adjust the following GRAPHIC EQUALIZER controls.
100 Hz: Boosts or cuts heavy bass.
330 Hz: Adjusts the power, spaciousness and warmth of the sound.
1 kHz: Accentuates or dims vocals.
3.3 kHz: Boosts to a brighter sound or reduces stridency.
10 kHz: Adjusts tape hiss noise.

Adjusting the Balance

When the position of the speakers is not symmetrical, the relative strength of the right and left speaker outputs will be unbalanced.
Adjust the balance with the BALANCE control.

Reinforcing the Bass

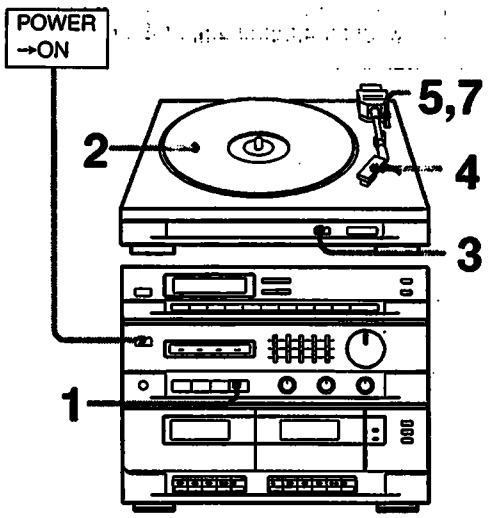
Adjust the DBFB control.
The lower the volume is, the more the bass is emphasized.

Enjoying the Surround Effect

To increase the feeling of spaciousness, turn the SURROUND control clockwise.
To decrease it, turn the control counterclockwise.

For private listening
Connect a pair of headphones to the HEADPHONES jack.

Playing Records



1 Press the PHONO button.

2 Place a record on the turntable.

3 Select the speed with SPEED selector.

4 Remove the cover from the cartridge, and release the tone arm from its armrest.

5 Set the cueing lever to ▼.

6 Move the tone arm by hand to the desired point on the record.

7 Set the cueing lever to ▼.

When the record is played to the end, the tone arm returns to the armrest and the turntable stops.

To stop during play, press REJECT.

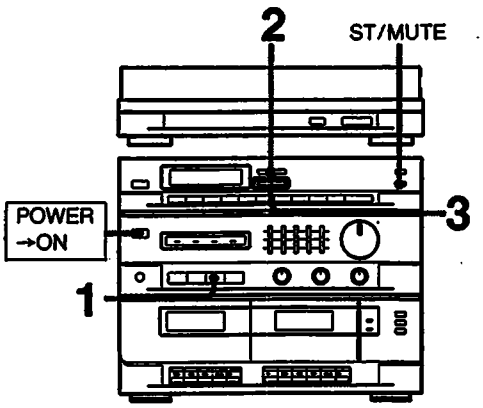
To play a different part of the record
Lift the tone arm by setting the cueing lever to ▼, move the tone arm by hand to the desired point, then set the cueing lever to ▼.

To play a 17-cm record
Use the supplied adaptor.

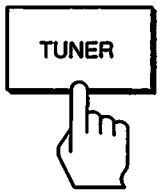
If the tone arm moves outward when you move it close to the center
Do not resist this movement, as it may damage the automatic return mechanism.

If the tone arm does not return to its armrest
Press REJECT.

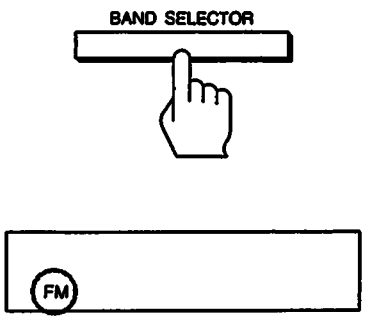
Turning in to Radio Stations



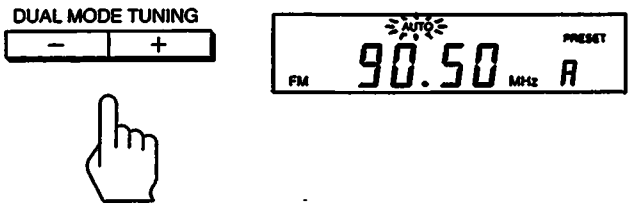
1



2 Select the band.



3 Keep + or − pressed for over 2 seconds so that "AUTO" blinks.



The unit starts scanning frequencies and stops when it tunes in to a station.
Repeat this step until the desired station is tuned in.

For receiving FM stations in stereo
Press ST/MUTE so that "MUTING" appears.

If you cannot tune in a desired station
A station with a weak signal may be skipped. In this case, tune in the station manually.
1 Press + or − again to stop scanning.
2 Press + or − repeatedly and tune in the exact frequency.

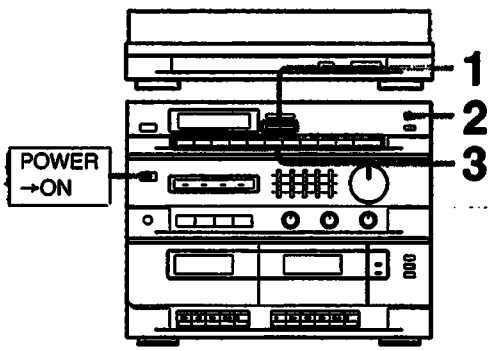
When an FM stereo program is noisy or hard to receive
Press ST/MUTE so that "MUTING" disappears from the display. There will be no stereo effect, but the reception will be improved. Press again to restore the stereo effect.

The "TUNED" indication appears
When a station of sufficient signal strength is tuned in.

The "STEREO" indication appears
When an FM stereo program of sufficient signal strength is tuned in.

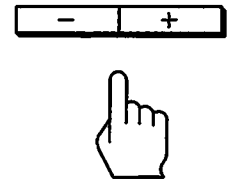
Storing Station Frequencies for Quick Recall

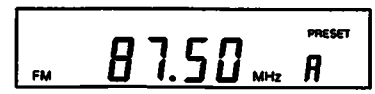
You can store station frequencies in the unit's memory for quick recall later on. Up to 30 frequencies in either band can be stored by specifying a code for each frequency. The code is a combination of an alphabet – A, B or C – and a numeral – 1 to 0 – :A-1, A-2, ..., B-1, ..., C-1, ... C-0.



1 Tune in a desired station.

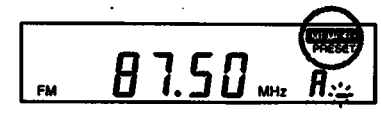
DUAL MODE TUNING





2

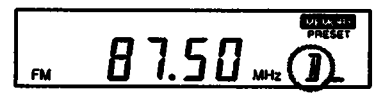
MEMORY



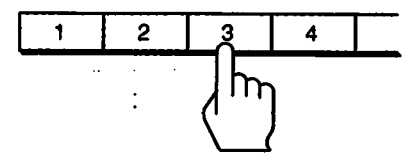
3 Specify a code.

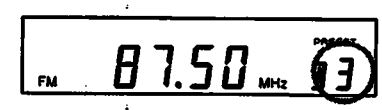
❶ Select alphabet.

SHIFT



❷ Select numeral.





If you cannot store a station successfully

Be sure to press the buttons for the code while the "MEMORY" indication is displayed. If the indication has gone off, press MEMORY again.

To erase a stored station

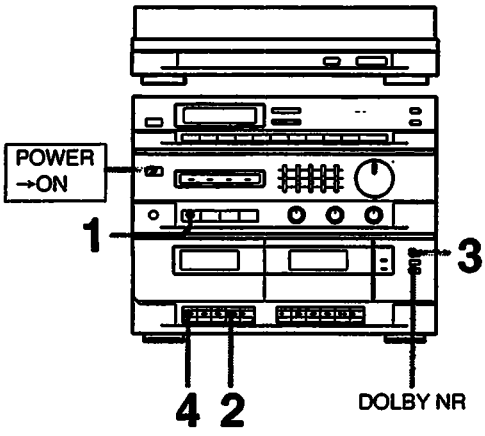
Storing a new station on a used code erases the previously stored one.

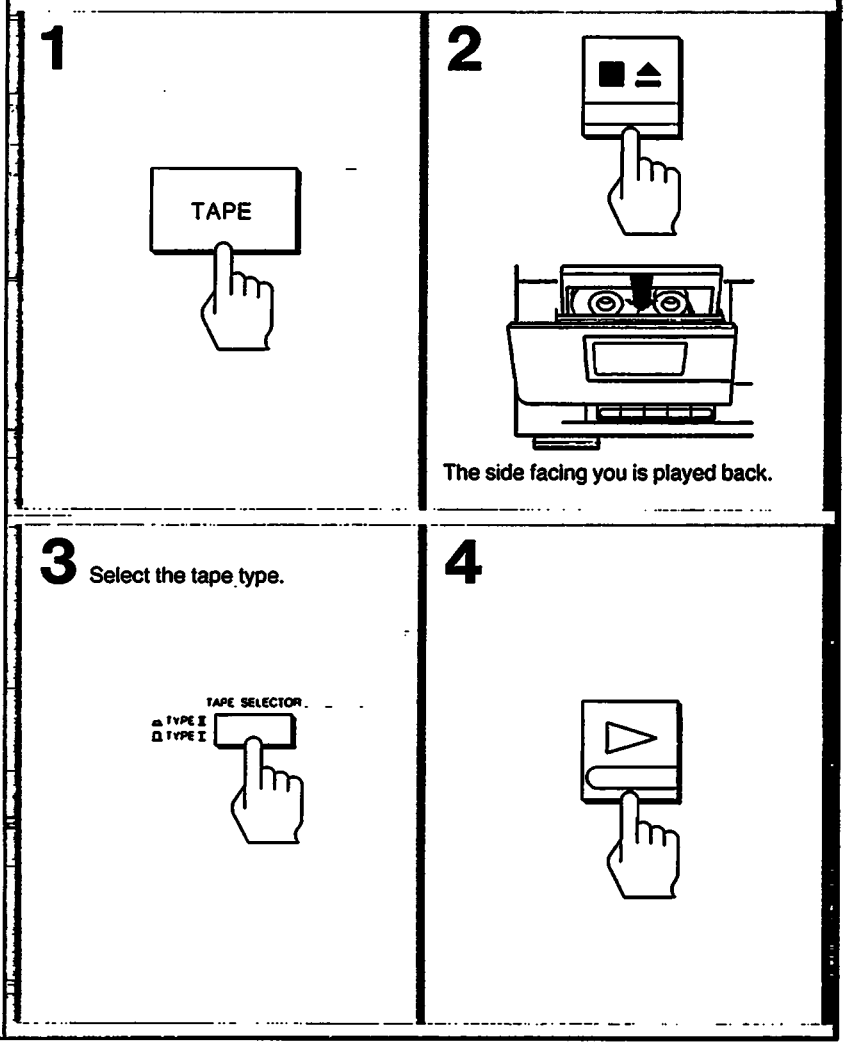
Tuning in to a Stored Station Directly

Press SHIFT and a numeric button to specify the code for the desired station.

Playing Back Tapes

Playing Deck A or B





When the tape is played to the end, the deck stops.

To stop during playback, press ■⏏.
To fast forward or rewind, press ▶▶ or ◀◀.
To pause, press ▮▮ PAUSE . To resume, press ▮▮ PAUSE again.

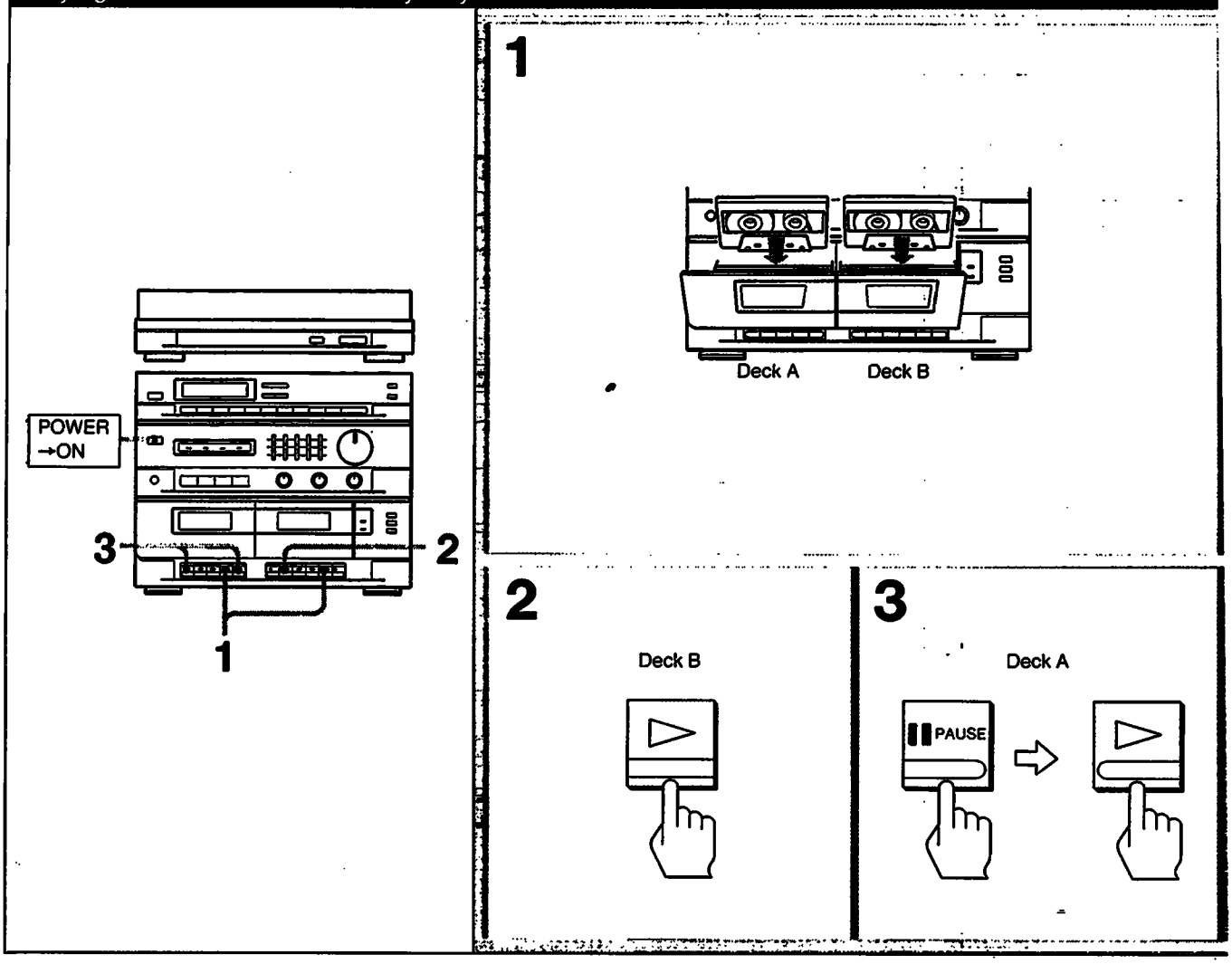
To play a tape recorded with the DOLBY NR* effect
Set DOLBY NR to ON.
The same setting operates on both decks.

To select the tape type
Type I and II can be played back.
Set TAPE SELECTOR to the corresponding position.

When ▶ on both decks are pressed
Only the sound from deck B will be heard.

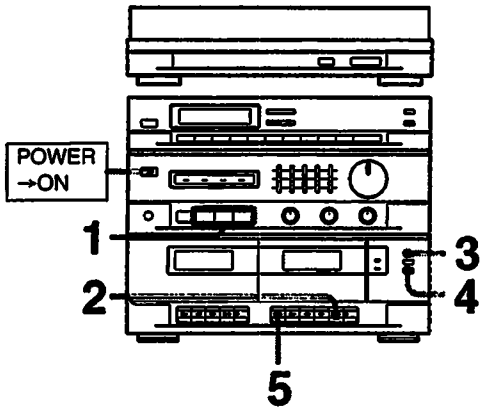
* *Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.*
"DOLBY" and the double-D symbol DD are trademarks of Dolby Laboratories Licensing Corporation.

Playing from Deck to Deck – Relay Play

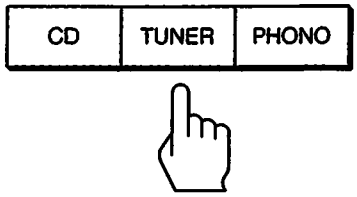


When the tape in deck B ends, the tape in deck A starts playing.

Recording on Tapes

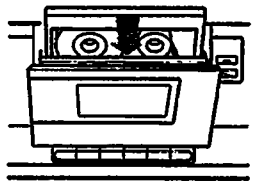


1 Select a source.



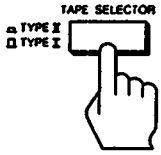
2

Deck B

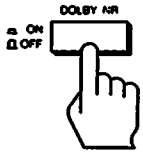


The source is recorded on the side facing you.

3 Select the tape type.



4 Select the Dolby NR system.



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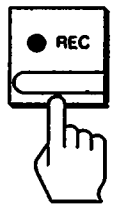


When the tape is recorded to the end, the deck stops.

To stop during recording, press ■ ⏏.

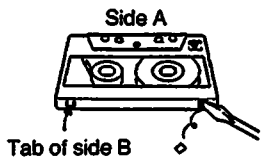
To select the tape type
Type I and II can be used for recording.
Set TAPE SELECTOR to the corresponding position.

To record with the Dolby NR effect
Set Dolby NR to ON.
The Dolby NR (noise reduction) system reduces tape hiss noise in low-level, high-frequency signals by boosting the signals during recording and then lowering them during playback.

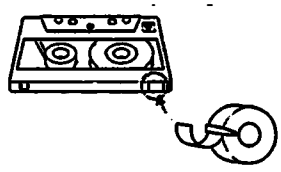
To start recording more precisely
1 After steps 1 to 4 above, press ❚❚ PAUSE.
2 Press ● REC.
3 Press ❚❚ PAUSE again to start recording.

Protecting your Recording

Break off the tab of the side to be protected.
This prevents further recording on that side.

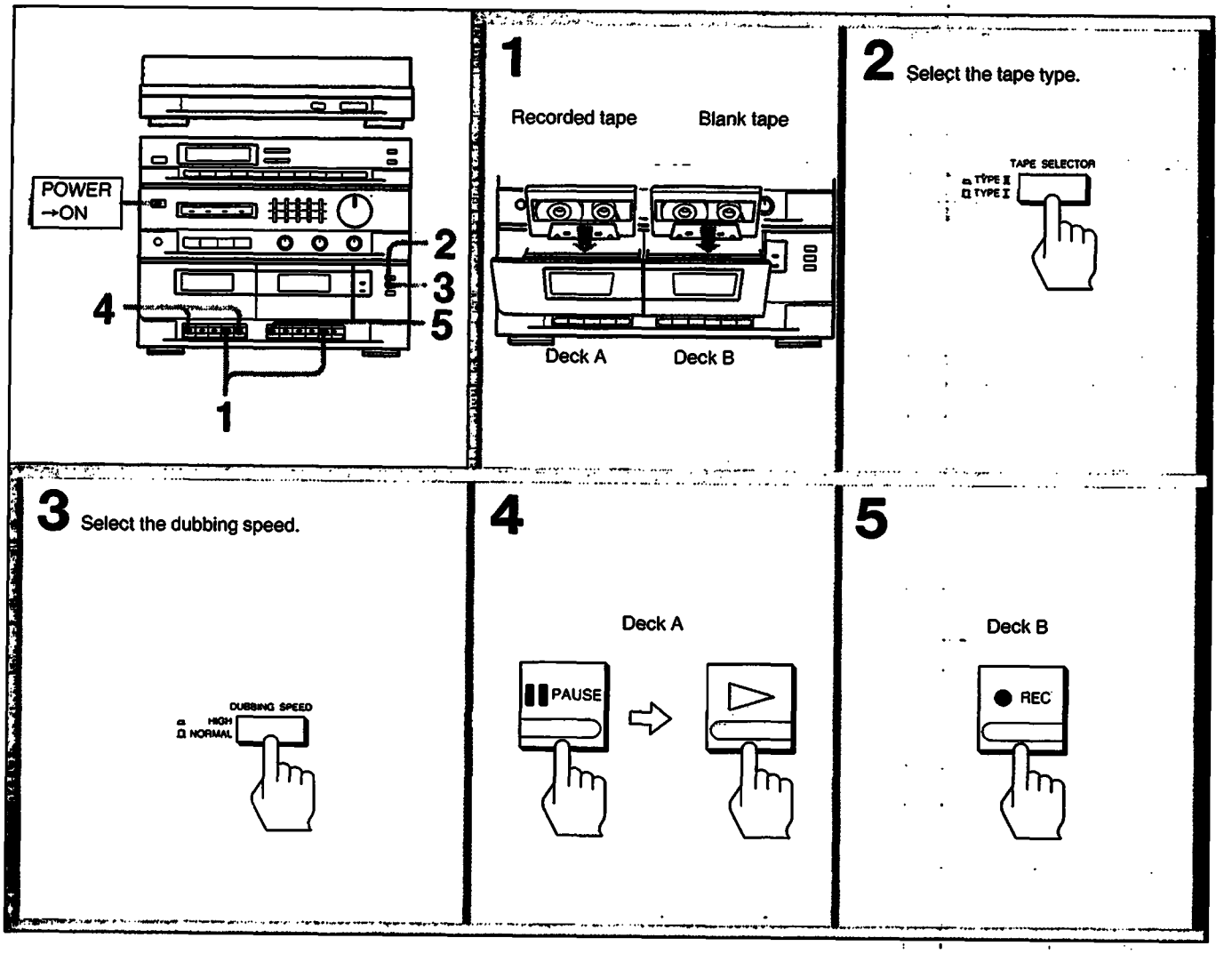


To record on a protected tape, cover the opening with plastic tape.



Dubbing Tapes

You can dub a tape in deck A onto a tape in deck B. You can choose between two speeds; normal speed and high speed dubbing.



To stop dubbing, press ■ ⏏ on deck A, then press ■ ⏏ on deck B

To select the tape type
Type I and II can be used for dubbing.
Set TAPE SELECTOR to the corresponding position.
Be sure to use tapes of the same type for dubbing, since the switch setting is effective on both decks.

You need not designate the Dolby NR system
The tape in deck B is recorded with the same Dolby NR system as the original tape in deck A.

You can listen to other program sources during dubbing.
Select the program source with the function selectors.

Maintenance

Cleaning the Cabinet

Use a soft cloth lightly moistened with a mild detergent solution.

Replacing the Stylus

Replace the stylus after every 400 hours of use.
Turn off the power before replacing the stylus. Handle the stylus with care.

Demagnetizing the Heads

Remove magnetism built up on the heads after every 20 to 30 hours of use.
Turn off the power before demagnetizing the heads. Use any commercially available demagnetizer.

Cleaning Heads and Tape Path

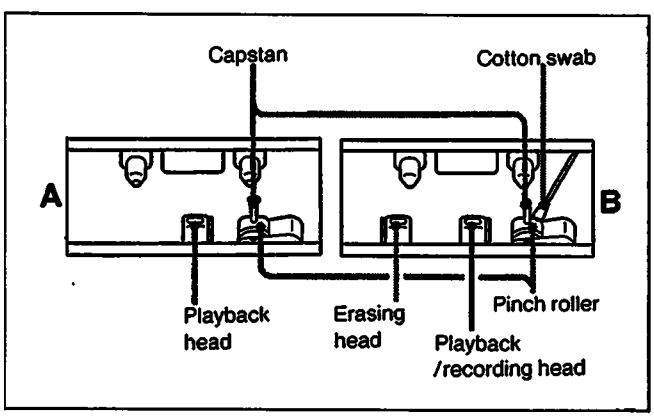
Clean after every 10 hours of use and before recording.

1 Press ■ ⏏ to open the cassette holder.

2 Moisten a cotton tip slightly with cleaning fluid or alcohol.

3 Wipe heads, pinch roller and capstans.

Do not insert a cassette until cleaned areas are completely dry.



Specifications

AUDIO POWER SPECIFICATIONS

POWER OUTPUT AND TOTAL HARMONIC DISTORTION:

With 6 ohm loads both channels driven, from 40 – 20,000 Hz; rated 12 watts per channel minimum RMS power, with no more than 0.5% total harmonic distortion from 250 millwatts to rated output.

Tuner

System	FM stereo FM/AM superheterodyne tuner
FM tuner section	
Tuning range	87.5 to 108 MHz
Antenna	75 ohms unbalanced 300 ohms balanced
Intermediate frequency	10.7 MHz
AM tuner section	
Tuning range	530 to 1,710 kHz
Antenna	AM loop antenna External antenna terminal
Intermediate frequency	450 kHz

Amplifier

Input	Jack type	Sensitivity	Impedance
PHONO IN	Phono	3 mV	47 kohms
CD IN	Phono	300 mV	47 kohms

Output	Jack type	Impedance
HEADPHONES	Stereophone	Accepts headphones of 8 ohms or more

Frequency response: CD: 15 Hz to 50 kHz ±3 dB

Cassette deck

Recording system	4-track 2-channel stereo
Frequency response	DOLBY NR OFF With Type II cassette (Sony UX-S) 40 Hz to 14 kHz (±3 dB) With Type I cassette (Sony HF-S) 40 Hz to 13 kHz (±3 dB)
Wow and flutter	0.1% (WRMS)

General

Power requirements	120 V AC, 60 Hz
Power consumption	60 W
Weight	Approx. 6.5 kg (14 lb 6 oz)
Dimensions	Approx. 355 × 290 × 325 mm (14 × 11 1/2 × 12 7/8 inches) (w/h/d, including projections)

Turntable

Platter	30 cm (12 inches)
Tonearm type	Dynamically balanced
Cartridge type	Moving magnet type
Stylus	Sony ND-155G (0.6 mil diamond)
Weight	Approx. 2.1 kg (4 lb 6 oz)
Dimensions	Approx. 355 × 94 × 338 (14 × 3 3/4 × 13 3/8 inches) (w/h/d, including projections)

Speaker system

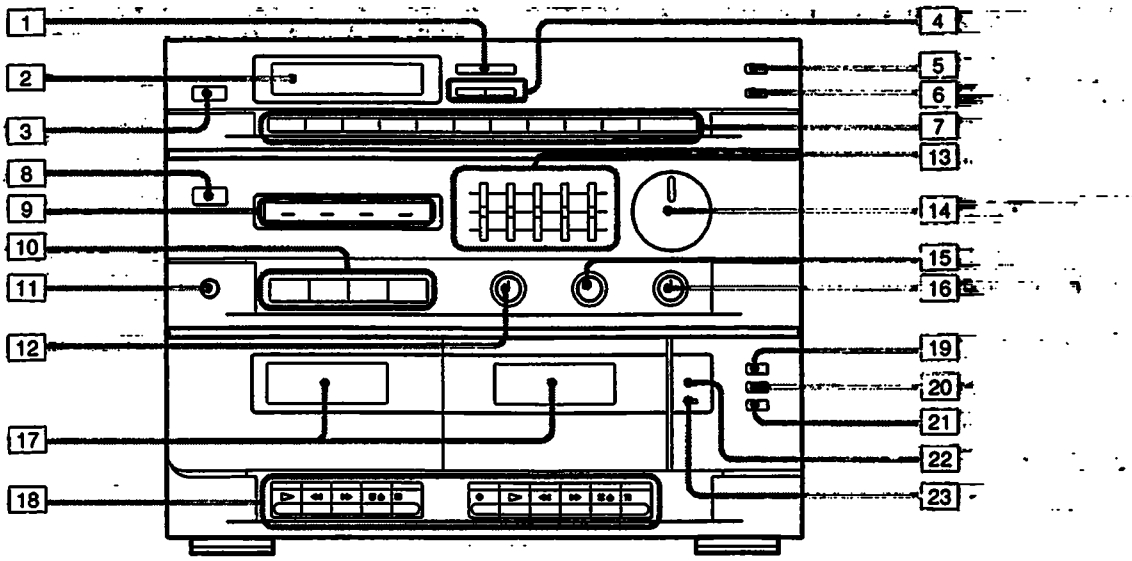
Speaker system	3-way speaker system
Weight	Approx. 4.3 kg (9 lb 8 oz), per speaker
Dimensions	Approx. 260 × 440 × 175 mm (10 1/4 × 17 3/8 × 7 inches) (w/h/d)

Supplied accessories

Remote commander (1)
Batteries Sony SUM-3 (NS) (2)
FM wire antenna (1)
AM loop antenna (1)
45-rpm adaptor

Design and specifications subject to change without notice.

Location of Controls



Refer to pages indicated in ● for details.

Tuner

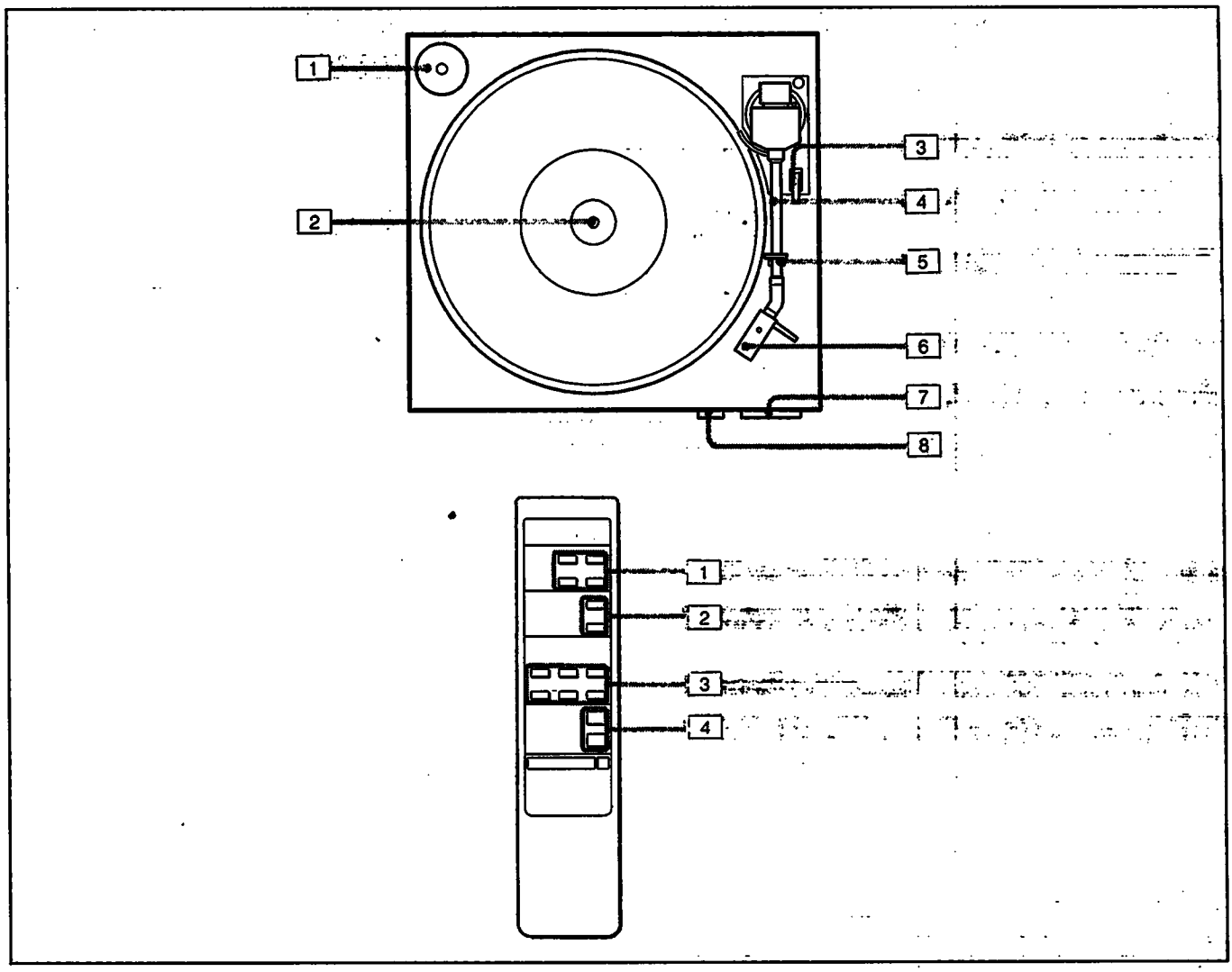
1 BAND SELECTOR ●8
2 Display window
3 Remote sensor
4 DUAL MODE TUNING buttons ●8
5 MEMORY button ●9
6 ST/MUTE button ●8
7 Buttons for storing stations frequencies ●9

Amplifier

8 POWER switch ●6
9 Function indicators
10 Function selectors
11 HEADHONES jack ●6
12 SURROUND control ●6
13 GRAPHIC EQUALIZER controls ●6
14 VOLUME control ●6
15 DBFB (dynamic bass feedback) control ●6
16 BALANCE control ●6

Cassette deck

17 Cassette holders
18 Tape operation buttons ●10
◀◀ Leftward fast winding
▶▶ Rightward fast winding
▶ Forward play
■⏏ Stop/eject
❚❚ PAUSE
● REC (deck B only)
19 TAPE SELECTOR switch ●10
20 DUBBING SPEED selector ●13
21 DOLBY NR (noise reduction) switch ●10
22 HIGH SPEED DUBBING INDICATOR
23 RECORD INDICATOR



Turntable

1 45-rpm adaptor
2 Centre spindle
3 Cueing lever
4 Tone arm
5 Armrest
6 Cartridge
7 REJECT button
8 SPEED selector

Remote commander

1 Function selectors
2 PRESET buttons
Scan stations stored in the unit.
3 CD player operation buttons *
The DISC SKIP button functions only on a CD player with multiple disc trays.
4 VOLUME buttons

*Utilizable only with Sony's CD players

Troubleshooting Guide

General

Symptom	Cause and remedy
No power.	• Connect the AC power cord securely.
No audio.	• Turn up the volume. • Connect the speaker cords securely.
Reversed left and right sound.	• Connect the speaker cords correctly.
Severe hum or noise.	• Make connections securely. • Move TV/VTR away from the unit.

Tuner

Symptom	Cause and remedy
The "TUNED" or "STEREO" indication blinks.	• Adjust the location and direction of the antenna. Connect to an external antenna if the indication still blinks.
Severe hum or noise.	• Adjust the location and direction of the antenna. Connect to an external antenna if hum or noise still interferes with reception. • Turn off CD player, if connected.

Cassette deck

Symptom	Cause and remedy
You cannot play back a tape.	• Press the ▮▮ PAUSE button to release the unit from the pause mode.
You cannot record on a tape.	• The tab has been removed from the cassette.
You cannot dub tapes.	• The tab of the cassette in deck B has been removed.
Unbalanced tone in higher frequencies.	• Set the DOLBY NR switch to the same position as was set for recording.
Unclear recording or playback.	• Clean and demagnetize the recording/playback head.
Excessive wow or flutter, or sound dropout.	• Clean the capstan and pinch roller.
Incomplete erasure.	• Demagnetize the erasing head.

Turntable

Symptom	Cause and remedy
Tone arm skips, skates or does not advance.	• Place the turntable on a level surface. • The record is dirty or scratched.
Poor sound quality.	• Clean or replace the stylus.
Rumble or low frequency howl.	• Move speakers away from the turntable.
The tone arm does not return to its armrest.	• Press REJECT.

Remote commander

Symptom	Cause and remedy
The remote commander does not function.	• Remove any obstruction between the remote commander and the remote sensor on the unit. • The remote commander is being used beyond its operating range. • Replace the batteries in the remote commander.